

GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: August 28, 2002, 11:25:22 ; Search time 13.07 Seconds  
(without alignments)  
717.630 Million cell updates/sec

Title: US-09-810-936-304

Perfect score: 2064

Sequence: 1 MVVEVDSMPAASSVKPFGL.....MLKISSNSNPENVSRTNK 384

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

- Issued Patents AA:\*
- 1: /cgn2\_6/ptodata/2/iaa/5A\_COMB.pap.\*
  - 2: /cgn2\_6/ptodata/2/iaa/5B\_COMB.pap.\*
  - 3: /cgn2\_6/ptodata/2/iaa/6A\_COMB.pap.\*
  - 4: /cgn2\_6/ptodata/2/iaa/6B\_COMB.pap.\*
  - 5: /cgn2\_6/ptodata/2/iaa/PCTUS\_COMB.pap.\*
  - 6: /cgn2\_6/ptodata/2/iaa/backfiles1.pap.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	DB ID	Description
1	2064	100.0	1719	4	US-09-439-313-378
2	2024	98.1	656	4	Sequence 378, App
3	2024	98.1	671	4	Sequence 379, App
4	1314	63.7	292	4	Sequence 380, App
5	1136	55.0	329	4	Sequence 532, App
6	623	30.2	148	4	Sequence 376, App
7	231	11.2	1423	4	Sequence 377, App
8	230.5	11.2	843	2	Sequence 10, App
9	228.5	11.1	352	3	Sequence 3, Appli
10	228.5	11.1	1745	2	Sequence 139, App
11	228.5	11.1	1745	2	Sequence 33, Appl
12	228.5	11.1	1745	3	Sequence 33, Appl
13	228.5	11.1	1839	2	Sequence 33, Appl
14	226	10.9	949	4	Sequence 4, Appli
15	226	10.9	1327	4	Sequence 10, Appl
16	225	10.9	1088	4	Sequence 2, Appli
17	224	10.9	673	4	Sequence 2, Appli
18	221.5	10.7	787	4	Sequence 8, Appli
19	209.5	10.2	303	2	Sequence 334, App
20	209.5	10.2	303	3	Sequence 33, Appl
21	209.5	10.2	303	3	Sequence 23, Appl
22	209.5	10.2	687	2	Sequence 21, Appl
23	209.5	10.2	687	4	Sequence 21, Appl
24	209	10.1	688	2	Sequence 23, Appl
25	209	10.1	688	4	Sequence 23, Appl
26	206	10.0	752	1	Sequence 2, Appli
27	206	10.0	752	1	Sequence 2, Appli

28	206	10.0	752	2	US-08-735-716-2	Sequence 2, Appli
29	206	10.0	752	2	US-08-555-568B-2	Sequence 2, Appli
30	206	10.0	752	4	US-09-519-223-2	Sequence 2, Appli
31	206	10.0	752	5	PCT-US95-08069-2	Sequence 2, Appli
32	205.5	10.0	422	2	US-08-484-575A-6	Sequence 6, Appli
33	205.5	10.0	422	3	US-08-477-459-6	Sequence 6, Appli
34	205.5	10.0	422	3	US-08-479-869-6	Sequence 6, Appli
35	205.5	10.0	422	4	US-08-486-414-6	Sequence 6, Appli
36	205.5	10.0	422	5	PCT-US94-01826A-6	Sequence 6, Appli
37	205.5	10.0	422	5	PCT-US94-02252A-6	Sequence 6, Appli
38	203.5	9.9	718	4	US-08-973-005A-12	Sequence 12, Appl
39	203	9.8	348	2	US-09-031-485-28	Sequence 28, Appl
40	203	9.8	348	2	US-08-847-429A-28	Sequence 28, Appl
41	203	9.8	348	3	US-09-065-474-28	Sequence 28, Appl
42	201.5	9.8	302	2	US-09-031-485-38	Sequence 38, Appl
43	201.5	9.8	302	2	US-08-847-429A-38	Sequence 38, Appl
44	201.5	9.8	302	3	US-09-065-474-38	Sequence 38, Appl
45	200	9.7	394	2	US-08-555-568B-17	Sequence 17, Appl

ALIGNMENTS

RESULT 1  
US-09-439-313-378  
; Sequence 378, Application US/09439313  
; Patent No. 6329505  
; GENERAL INFORMATION:  
; APPLICANT: Xu, Jiangchun  
; APPLICANT: Dillon, Davin C.  
; APPLICANT: Mitcham, Jennifer L.  
; APPLICANT: Harlocker, Susan Louise  
; APPLICANT: Jiang Yuqui  
; APPLICANT: Reed, Steven G.  
; APPLICANT: Kalos, Michael  
; APPLICANT: Fanger, Gary  
; APPLICANT: Retter, Mark  
; APPLICANT: Solk, John  
; APPLICANT: Day, Craig  
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND  
; TITLE OF INVENTION: DIAGNOSIS OF PROSTATE CANCER  
; FILE REFERENCE: 210121.427C9  
; CURRENT FILING DATE: 1999-11-12  
; NUMBER OF SEQ ID NOS: 575  
; SOFTWARE: FastSeq for Windows Version 3.0  
; SEQ ID NO 378  
; LENGTH: 1719  
; TYPE: PRT  
; ORGANISM: Homo sapien  
US-09-439-313-378

Query Match 100.0%; Score 2064; DB 4; Length 1719;  
Best Local Similarity 100.0%; Pred. No. 2e-204;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MVVEVDSMPAASSVKPFGLRSKMGKWCRCFPCCRESKSNVGTSGDHHDSAMKTLRSK	60
Db	1	MVVEVDSMPAASSVKPFGLRSKMGKWCRCFPCCRESKSNVGTSGDHHDSAMKTLRSK	60
QY	61	MGKWCRCFPCCRGSGKSNVGASGDHDSAMKTLRNKMGKWCRCFPCCRGSGSKVGAW	120
Db	61	MGKWCRCFPCCRGSGKSNVGASGDHDSAMKTLRNKMGKWCRCFPCCRGSGSKVGAW	120
QY	121	GDYDVSFAFMEPRYHVVRGDLKLHRAAWKGVPRKDLIVMLRDTDVNKKDKQKRTALHIA	180
Db	121	GDYDVSFAFMEPRYHVVRGDLKLHRAAWKGVPRKDLIVMLRDTDVNKKDKQKRTALHIA	180
QY	181	SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCEDECALMLEHGTDPNIPDEYGN	240
Db	181	SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCEDECALMLEHGTDPNIPDEYGN	240

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QY 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
|||||
Db 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
|||||
QY 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
|||||
Db 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
|||||
QY 361 KEKOMLKISSENSNPENSVTRNK 384
|||||
Db 361 KEKOMLKISSENSNPENSVTRNK 384
|||||

RESULT 2
US-09-439-313-379
; Sequence 379, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqui
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 379
; LENGTH: 656
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-439-313-379

Query Match 98.1%; Score 2024; DB 4; Length 656;
Best Local Similarity 100.0%; Pred. No. 6.9e-201;
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFLGRSKMGKWCRCFCPCCRSGSKSNVGTSGDHDDSAMKTLRSK 60
|||||
Db 1 MVVEVDSMPAASSVKKPFLGRSKMGKWCRCFCPCCRSGSKSNVGTSGDHDDSAMKTLRSK 60
|||||
QY 61 MGKWCRCFCPCCRSGSKSNVGASGDHDDSAMKTLRNKMGKWCCHFCPCCRSGSKSKVGAW 120
|||||
Db 61 MGKWCRCFCPCCRSGSKSNVGASGDHDDSAMKTLRNKMGKWCCHFCPCCRSGSKSKVGAW 120
|||||
QY 121 GYDDSAFMEPRYHVRGEDDLKLRAAWGWKVPKDLIVMLRDTDVNKKDKOKRTALHLA 180
|||||
Db 121 GYDDSAFMEPRYHVRGEDDLKLRAAWGWKVPKDLIVMLRDTDVNKKDKOKRTALHLA 180
|||||
QY 181 SANGSEVVKLLDRRCQLNVLNKKRTALIKAVOCQDECECALMLEHGTDPNIPDEYGN 240
|||||
Db 181 SANGSEVVKLLDRRCQLNVLNKKRTALIKAVOCQDECECALMLEHGTDPNIPDEYGN 240
|||||
QY 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
|||||
Db 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
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QY 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
|||||
Db 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
|||||
QY 361 KEKOMLKISSENSNPENSVTRNK 384
|||||
Db 361 KEKOMLKISSENSNPENSVTRNK 384
|||||

RESULT 4
US-09-439-313-532
; Sequence 532, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
```

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Db 361 KEKOMLKISSENSNPENSVTRNK 376
|||||

RESULT 3
US-09-439-313-380
; Sequence 380, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Harlocker, Susan Louise
; APPLICANT: Jiang Yuqui
; APPLICANT: Reed, Steven G.
; APPLICANT: Kalos, Michael
; APPLICANT: Fanger, Gary
; APPLICANT: Retter, Mark
; APPLICANT: Solk, John
; APPLICANT: Day, Craig
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
; FILE REFERENCE: 210121.427C9
; CURRENT APPLICATION NUMBER: US/09/439,313
; CURRENT FILING DATE: 1999-11-12
; NUMBER OF SEQ ID NOS: 575
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 380
; LENGTH: 671
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-439-313-380

Query Match 98.1%; Score 2024; DB 4; Length 671;
Best Local Similarity 100.0%; Pred. No. 7.1e-201;
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFLGRSKMGKWCRCFCPCCRSGSKSNVGTSGDHDDSAMKTLRSK 60
|||||
Db 1 MVVEVDSMPAASSVKKPFLGRSKMGKWCRCFCPCCRSGSKSNVGTSGDHDDSAMKTLRSK 60
|||||
QY 61 MGKWCRCFCPCCRSGSKSNVGASGDHDDSAMKTLRNKMGKWCCHFCPCCRSGSKSKVGAW 120
|||||
Db 61 MGKWCRCFCPCCRSGSKSNVGASGDHDDSAMKTLRNKMGKWCCHFCPCCRSGSKSKVGAW 120
|||||
QY 121 GYDDSAFMEPRYHVRGEDDLKLRAAWGWKVPKDLIVMLRDTDVNKKDKOKRTALHLA 180
|||||
Db 121 GYDDSAFMEPRYHVRGEDDLKLRAAWGWKVPKDLIVMLRDTDVNKKDKOKRTALHLA 180
|||||
QY 181 SANGSEVVKLLDRRCQLNVLNKKRTALIKAVOCQDECECALMLEHGTDPNIPDEYGN 240
|||||
Db 181 SANGSEVVKLLDRRCQLNVLNKKRTALIKAVOCQDECECALMLEHGTDPNIPDEYGN 240
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QY 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
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Db 241 TTHVAYINEDKLMKALLLYGADIESKNKHGLTPLLLVGHEQKQOVVKFLIKKANLNA 300
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QY 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
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Db 301 LDRYGR TALILAVCCGSASIVSLLLEQNDIVSSQDLSGQTAREYAVSSHVHVICQLLSY 360
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QY 361 KEKOMLKISSENSNPENSVTRNK 376
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Db 361 KEKOMLKISSENSNPENSVTRNK 376
|||||

RESULT 4
US-09-439-313-532
; Sequence 532, Application US/09439313
; Patent No. 6329505
; GENERAL INFORMATION:
; APPLICANT: Xu, Jiangchun
; APPLICANT: Dillon, Davin C.
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Db      145 KMK 147

||||
RESULT 7
US-08-810-712-10
; Sequence 10, Application US/08810712G
; Patent No. 6160106
; GENERAL INFORMATION:
; APPLICANT: Veda Research and Development Co. LTD
; TITLE OF INVENTION: Tumor Suppressor Genes, Proteins Encoded Thereby and
; TITLE OF INVENTION: Use of said Genes and Proteins
; FILE REFERENCE: sequencelist
; CURRENT APPLICATION NUMBER: US/08/810,712G
; CURRENT FILING DATE: 1997-03-03
; EARLIER APPLICATION NUMBER: PCT/US94/11598
; EARLIER FILING DATE: 1994-10-12
; NUMBER OF SEQ ID NOS: 31
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 1423
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-810-712-10

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Query Match	11.28;	Score	231;	DB	4;	Length	1423;
Best Local Similarity	28.6%;	Pred.	No. 7e-15;				
Matches	64;	Conservative	36;	Mismatches	108;	Indels	16; Gaps
							2;
QY	143	LHRAAMWGVPKDKIIVMLRDTDNVKDKOKRTALHLASANGSENVKKILLDRRCOLNVL	202				
		:   :   :   :   :   :   :   :   :   :   :					
Db	441	LHVAAARYGHADVAQVTCASAQAQIPISRTKEETPLCAAHGGYYSAKALCEAGCNVNLIK	500				
		:   :   :   :   :   :   :   :   :   :   :					
QY	203	DNKKRTLTKA-----VQCDEECALMLEHGTPDNPIDPEYNTTLHYAIYNEDKML	254				
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Db	501	NREGETPLLTASARGYHDIVEC-----LAEHGADLNACDKDGHIALHLAVRRQCMEV	552				
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QY	255	AKALLLYGADIESKNKHGLTPLLGVHBKOQOVKELKKKANILANLDRYGRTRALTILAVC	314				
		:   :   :   :   :   :   :   :   :   :   :   :   :					
Db	553	IKTLSSQGCFVDIQDHGNWPTLHVACKDGNNPIVVALCEANCNLDTSNKYGRTPHLAAN	612				
		:   :   :   :   :   :   :   :   :   :   :   :   :					
QY	315	CGSASTVSLLLEONTDVSSQLSGOTAREYAVSSHHHVICQLLS	358				
		:   :   :   :   :   :   :   :   :   :   :   :   :					
Db	613	NGILDVVRVYLCLMGASVEALTTDGTATDLARSBOHEHVAGLIA	956				
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RESULT      8
US-09-172-977-3
US-09-172-977-3, Application US/09172977
; Sequence 3, Application US/09172977
; Patent No. 5989863
; GENERAL INFORMATION:
; APPLICANT: Tang, Y. Tom
; APPLICANT: Guegler, Karl J.
; APPLICANT: Corley, Neil C.
; APPLICANT: Yue, Henry
; TITLE OF INVENTION: HUMAN ANKYRIN FAMILY PROTEIN
; FILE REFERENCE: PF-0615 US
; CURRENT APPLICATION NUMBER: US/09/172,977
; CURRENT FILING DATE: 1998-10-14
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PERL Program
; SEQ ID NO 3
; LENGTH: 843
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; FEATURE: -
; OTHER INFORMATION: g1841966
US-09-172-977-3

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Query Match	11.2%;	Score 230.5;	DB 2;	Length 843;
Best Local Similarity	28.7%;	Pred. No. 3.7e-15;		

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	Matches	72;	Conservative	39;	Mismatches	101;	Indels	39;	Gaps	4;
QY	143	LHRAAWGKYPKDLIYLRLD	TDV--NKDKQKRTALHLASANGSENVVKLLLRRCOLN	200						
		:   :	:   :	:	:	:          :				
Db	499	LHISAREGV---	DVASVLLEAGAAHSLATKGFTPLHVAAKYGLSDYAKLILQRRAAD	555						
QY	201	VLDNKKRTALIKAVCOEDECALMLLEHGTDPNTPDEYGNITTLHVAIYNEDKLMAKALLL	260							
		:   :	:       :	:	:       :	:       :				
Db	556	SAGKNGLTPTPLHVAHYDNQKVALLLEKGPASHATAKNGYTPLHIAAKKNOMQIASTLLN	615							
QY	261	YGADIESKNGHGLTPLLGLLVGHKEQQVVVFLLIKKANL-----	298							
		:   :	:       :	:	:       :	:       :				
Db	616	YGAETNTVTQGVTPLHLASOEGHDTMVTIVLEKGANIHMSKSGLSLHLAEEEDKVN	675							
QY	299	-----NALDRYGRITALILAVCCGSASIYSLLEEQNIIDVSSQDLSGT-AREYAV	346							
		:   :       :	:   :       :	:	:   :       :	:   :       :				
Db	676	ADILTKHGADQDAYTKLGYTPLIVACHYGNVKWVNFLLKQGANVNAKTNGYTPLHQAAQ	735							
QY	347	SSHUVICQLL	357							
		:								
Db	736	QGHTHIINVLL	746							
RESULT 9										
US-09-065-474-139										
; Sequence 139, Application US/09065474										
; Patent No. 6063599										
; GENERAL INFORMATION:										
; APPLICANT: Tang, Liang										
; APPLICANT: Blehm, E. Scot										
; TITLE OF INVENTION: DIROFILARIA AND BRUGIA ANKYRIN										
; TITLE OF INVENTION: PROTEINS, NUCLEIC ACID MOLECULES, AND										
; TITLE OF INVENTION: USES THEREOF										
; NUMBER OF SEQUENCES: 171										
; CORRESPONDENCE ADDRESS:										
; ADDRESSEE: Carol Talkington Verser, Ph.D.										
; ADDRESSEE: Heska Corporation										
; STREET: 1825 Sharp Point Drive										
; CITY: Fort Collins										
; STATE: Colorado										
; COUNTRY: USA										
; ZIP: 80525										
; COMPUTER READABLE FORM:										
; MEDIUM TYPE: Floppy disk										
; COMPUTER: IBM PC compatible										
; OPERATING SYSTEM: Windows 95										
; SOFTWARE: WordPerfect for Windows, Version 7.0										
; CURRENT APPLICATION DATA:										

Query Match 11.1%; Score 228.5; DB 3; Length 352;  
Best Local Similarity 29.8%; Pred. No. 1.7e-15;  
Matches 67; Conservative 45; Mismatches 106; Indels 7; Gaps 4;





```
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 600-1-230 CIPI
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; TELEX: 133521
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 949 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-09-196-387-10

Query Match          10.9%; Score 226; DB 4; Length 949;
Best Local Similarity 26.0%; Pred. No. 1.3e-14;
Matches 82; Conservative 37; Mismatches 114; Indels 82; Gaps 6;

QY 137 GEDLDKHLRAAWGKVPKRDILVIMLRTDVNKKDKQKRTALHLASANGSEVVKLLDRL 196
Db 367 GRKSTPLHLAAGYNRV-RIVQLLLQHGADVHAKDKGLVPLHNACSYGHVEVTELLKHG 425

QY 197 COLNVLDNKKRTALIKAVQCOEDECALMLLEHGTDPNIPDEYG----- 239
Db 426 ACVNAMDLMQFTPLHEAASKNRVEVCSLLLSHGADPTLVNCHGKSAVDMAPTPELRERLT 485

QY 240 -----NTTLHYAI---YNEDKLMAKALL 259
Db 486 YEFKSHLSLQAAAREADLAKVKKTLALEINFKPQSHETALHCASVSLHPKRRQVTELL 545

QY 260 LYGADIESKNKHGLTPLLLVGHEQKQVVKFLKKKANLALDRYGTALILAVCCGSAS 319
Db 546 RKGANVNEKNKDFMPLHVAERAHNDVMEVLHKGAKMALTDLGQTALHRAALAGHLQ 605

QY 320 IVSLLLEQNIDVSSQDLSGQTAREYAVSSHHHVICQLLS-----DYKEKQMLK-- 367
Db 606 TCRLLSYGSDFSIISLQGTAAQMG-----NEAVQOILSESTPIRTSDVDYRLLEASKAG 661

QY 368 -----ISSENSN 374
Db 662 DLETVKQLCSSQNVN 676

RESULT 15
US-09-196-387-2
; Sequence 2, Application US/09196387
; Patent No. 6277613
; GENERAL INFORMATION:
; APPLICANT: de Lange, Titia
; APPLICANT: Smith, Susan
; TITLE OF INVENTION: A PROTEIN THAT BINDS TO TRF1 AND METHODS
; TITLE OF INVENTION: OF USE THEREOF
; NUMBER OF SEQUENCES: 12
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Klauber & Jackson
; STREET: 411 Hackensack Avenue, 4th Floor
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/196,387
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/095,225
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; FILING DATE: June 10, 1998
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 600-1-230 CIPI
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 201-487-5800
; TELEFAX: 201-343-1684
; TELEX: 133521
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1327 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: NO
; US-09-196-387-2

Query Match          10.9%; Score 226; DB 4; Length 1327;
Best Local Similarity 26.0%; Pred. No. 2.1e-14;
Matches 82; Conservative 37; Mismatches 114; Indels 82; Gaps 6;

QY 137 GEDLDKHLRAAWGKVPKRDILVIMLRTDVNKKDKQKRTALHLASANGSEVVKLLDRL 196
Db 367 GRKSTPLHLAAGYNRV-RIVQLLLQHGADVHAKDKGLVPLHNACSYGHVEVTELLKHG 425

QY 197 COLNVLDNKKRTALIKAVQCOEDECALMLLEHGTDPNIPDEYG----- 239
Db 426 ACVNAMDLMQFTPLHEAASKNRVEVCSLLLSHGADPTLVNCHGKSAVDMAPTPELRERLT 485

QY 240 -----NTTLHYAI---YNEDKLMAKALL 259
Db 486 YEFKSHLSLQAAAREADLAKVKKTLALEINFKPQSHETALHCASVSLHPKRRQVTELL 545

QY 260 LYGADIESKNKHGLTPLLLVGHEQKQVVKFLKKKANLALDRYGTALILAVCCGSAS 319
Db 546 RKGANVNEKNKDFMPLHVAERAHNDVMEVLHKGAKMALTDLGQTALHRAALAGHLQ 605

QY 320 IVSLLLEQNIDVSSQDLSGQTAREYAVSSHHHVICQLLS-----DYKEKQMLK-- 367
Db 606 TCRLLSYGSDFSIISLQGTAAQMG-----NEAVQOILSESTPIRTSDVDYRLLEASKAG 661

QY 368 -----ISSENSN 374
Db 662 DLETVKQLCSSQNVN 676

Search completed: August 28, 2002, 11:29:32
Job time: 250 sec
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GenCore version 4.5  
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OM protein - protein search, using sw model

Run on: August 28, 2002, 11:20:12 ; Search time 32.5 Seconds  
(without alignments)  
1312.380 Million cell updates/sec

Title: US-09-810-936-304  
Perfect score: 2064  
Sequence: 1 MYVEVDSMPAASSVKPFGL.....MLKISSENSPNVSRTRNK 384

Scoring Table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A\_Geneseq\_032802.\*  
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2: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1981.DAT.\*  
3: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1982.DAT.\*  
4: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1983.DAT.\*  
5: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1984.DAT.\*  
6: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1985.DAT.\*  
7: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1986.DAT.\*  
8: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA1987.DAT.\*  
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21: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT.\*  
22: /SIDSI/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2064	100.0	384	21 AAB28628	Human B11Ag1 anti
2	2064	100.0	384	22 AAG65976	B305D isoform C sp
3	2064	100.0	1719	21 AAY82017	Human immunogenic
4	2064	100.0	1719	22 AAU69777	Human prostate cDN
5	2064	100.0	1719	22 AAM01132	Human prostate-spe
6	2064	100.0	1719	22 AAG99017	Human prostate-spe
7	2064	100.0	1719	22 AAB74815	Prostate tumour an
8	2064	98.1	656	21 AAB74815	Human B11Ag1 anti
9	2064	98.1	656	21 AAY82018	Human immunogenic
10	2064	98.1	656	22 AAG65977	B305D isoform C sp
11	2064	98.1	656	22 AAU69778	Human prostate cDN

12	2024	98.1	656	22 AAM01133	Human prostate-spe
13	2024	98.1	656	22 AAG99018	Human prostate-spe
14	2024	98.1	656	22 AAB74816	Prostate tumour an
15	2024	98.1	671	21 AAB28630	Human B11Ag1 anti
16	2024	98.1	671	21 AAY82019	Human immunogenic
17	2024	98.1	671	22 AAG65978	B305D isoform C sp
18	2024	98.1	671	22 AAU69779	Human prostate cDN
19	2024	98.1	671	22 AAM01134	Human prostate-spe
20	2024	98.1	671	22 AAG99019	Human prostate-spe
21	2024	98.1	671	22 AAB74817	Prostate tumour an
22	1314	63.7	232	21 AAB28636	Human breast tumou
23	1314	63.7	292	22 AAG65975	B305D isoform A se
24	1314	63.7	292	22 AAG69821	Human prostate cDN
25	1314	63.7	292	22 AAM01176	Human prostate-spe
26	1314	63.7	292	22 AAG99061	Human prostate-spe
27	1136	55.0	329	21 AAB28626	Human B11Ag1 anti
28	1136	55.0	329	21 AAY82015	Human immunogenic
29	1136	55.0	329	22 AAG65974	B305D isoform A fi
30	1136	55.0	329	22 AAU69775	Human prostate cDN
31	1136	55.0	329	22 AAM01130	Human prostate-spe
32	1136	55.0	329	22 AAG99015	Human prostate-spe
33	1136	55.0	329	22 AAB74813	Prostate tumour an
34	628.5	30.5	346	22 AAB92646	Human protein sequ
35	623	30.2	148	21 AAB28627	Human B11Ag1 anti
36	623	30.2	148	21 AAY82016	Human immunogenic
37	623	30.2	148	22 AAU69776	Human prostate cDN
38	623	30.2	148	22 AAM01131	Human prostate-spe
39	623	30.2	148	22 AAG99016	Human prostate-spe
40	623	30.2	148	22 AAB74814	Prostate tumour an
41	544.5	26.4	239	22 AAM93703	Human polypeptide,
42	522	25.3	1341	22 AAB84702	Amino acid sequenc
43	520.5	25.2	232	21 AAB41851	Human ORFX ORF1615
44	497.5	24.1	225	22 ABO04083	Novel human diagno
45	493	23.9	218	20 AAY36106	Extended human sec

ALIGNMENTS

RESULT 1  
AAB28628  
ID AAB28628 standard; Protein; 384 AA.  
AC AAB28628;  
XX  
XX  
DI 13-FEB-2001 (first entry)  
XX  
DE Human B11Ag1 antigen splice isoform B11C-15.  
XX  
XX Human; breast tumour-specific antigen; cytostatic; vaccine;  
KW breast cancer; B18Ag1; B11Ag1; B15Ag1.  
KW  
XX Homo sapiens.  
XX  
XX WO2000061753-A2.  
XX  
PD 19-OCT-2000.  
XX  
XX 07-APR-2000; 2000WO-US09312.  
XX  
XX 09-APR-1999; 99US-0289198.  
PR 28-OCT-1999; 99US-0429755.  
PR 23-MAR-2000; 2000US-0534825.  
XX (CORI-) CORIXA CORP.  
XX Prudakis TN, Smith JM, Reed SG, Misher LE, Retter MW, Dillon DC;  
XX WPI; 2000-628403/60.  
DR N-PSDB; AAC81011.  
XX  
XX An isolated polypeptide comprising an immunogenic portion of a breast  
PT tumor protein used for inhibiting the development of cancer, especially

PT breast cancer, and monitoring cancer progression in a patient -  
XX Claim 3; Page 179; 187pp; English.  
XX The present sequence is given in a specification relating to compositions  
CC and methods for the treatment and diagnosis of breast cancer. Nucleotide  
CC sequences that are preferentially expressed in breast tumour tissue, and  
CC the polypeptides encoded by such nucleotide sequences, are used in  
CC compositions and vaccines to inhibit the development of cancer,  
CC especially breast cancer. The progression of a cancer may be monitored by  
CC carrying out detection of tumour-specific antigens at subsequent time  
CC points and comparing the results from the different time points.  
CC CD4+ and/or CD8+ T-Cells isolated from the cancer patient may be treated  
CC with tumour-specific polypeptides, polynucleotides encoding the  
CC polypeptides or antigen presenting cells expressing the polypeptides. The  
CC cells are then administered to the patient to inhibit development of  
CC cancer.  
XX  
XX Sequence 384 AA;  
SQ  
Query Match 100.0%; Score 2064; DB 21; Length 384;  
Best Local Similarity 100.0%; Pred. No. 2.1e-193;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCPCCRCSGKSNVGTSGDHDSAMKTLRSK 60  
DB 1 mvvevdsmpaassvkkpfglrskmgkwcrcpcrcresgksnvgtsghdhsamktrsk 60  
QY 61 MGKWCRCPCCRCSGKSNVGASGDHDSAMKTLRNKMGKWCCHFCPCCRSGSKSGVAG 120  
DB 61 mgkwcrcpcrcsgksnvgasgdhdsamktrlnkmgkwcchfcpcrcsgsksgvaw 120  
QY 121 GDYDTSAPMEPRYHVRGEDIKLHRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180  
DB 121 gdydsafmepryhvrgeidlkhraawgkvpkdlivmlrtdvnnkdkqkrtalhl 180  
QY 181 SANGNSEVYKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNIPDEYGN 240  
DB 181 sangnsevvkllldrrcqlnvldnkkrtalikavqcqedeccalmlehgtdpniipdeygn 240  
QY 241 TTLHYAIYNEDKLMKALLYGADIESKNKHGLTPLLIGVHEQKQOVVKFLIKKANLNA 300  
DB 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqkqqvkvflikkanlna 300  
QY 301 LDYGRRTALILAVCCGSASIVSLLEONIDVSSQDLSGQTAREYAVSSHVHVICOLLSDY 360  
DB 301 ldrygrtalilavccgsasivslleqnidvssqdisgqtareyavsshhvivicqlsdy 360  
QY 361 KEQMKLIKISSENSNPENVSRTNRK 384  
DB 361 kekqmlkissensnpenvsrtnrk 384  
RESULT 2  
AAG65976  
ID AAG65976 standard; Protein; 384 AA.  
XX  
AC AAG65976;  
XX  
DT 11-FEB-2002 (first entry)  
XX  
DE B305D isoform C splice variant 1.  
XX  
XX Genetic subtraction; DNA microarray analysis; polymerase chain reaction;  
KW cancer; B305D.  
XX  
XX Homo sapiens.  
XX  
XX WO200175171-A2.  
XX  
XX 11-OCT-2001.  
XX

PF 02-APR-2001; 2001WO-US10631.  
XX  
PR 03-APR-2000; 2000US-194241P.  
PR 20-JUL-2000; 2000US-219862P.  
PR 27-JUL-2000; 2000US-221300P.  
PR 18-DEC-2000; 2000US-256592P.  
XX (CORI-) CORIXA CORP.  
XX  
PI Houghton RL, Dillon DC, Molesh DA, Xu J, Zehentner B, Persing DH;  
XX WPI; 2001-626449/72.  
DR N-PSDB; AAI67211.  
XX  
XX Identifying tissue (tumour)-specific polynucleotides overexpressed in  
PT tissue of interest as compared to control tissue, for detecting cancer  
PT cells in patient, comprises DNA microarray analysis or quantitative  
PT polymerase chain reaction -  
XX  
XX Examples; Page 95-96; 127pp; English.  
XX  
CC The invention relates to identifying tissue-specific polynucleotides (P)  
CC that involves performing a genetic subtraction to identify pool of (P)  
CC from tissue of interest (TI), performing DNA microarray analysis to  
CC identify first subset of polynucleotides (S1) at least 2-fold over  
CC expressed in TI, and performing quantitative polymerase chain reaction  
CC (PCR) analysis on S1 to identify second subset of (P). The method is  
CC useful for determining the presence or absence of a cancer cell in a  
CC patient, monitoring the progression of cancer in a patient using a  
CC biological sample such as blood, serum, lymph nodes, bone marrow, sputum,  
CC urine or a tumour biopsy sample. The methods are useful for determining  
CC the presence or absence of or monitoring progression of prostate, breast,  
CC colon, ovarian, lung, head and neck, lymphoma, leukemia, melanoma, liver,  
CC gastric, kidney, bladder, pancreatic or endometrial cancer. The present  
CC sequence represents a B305D isoform C splice variant.  
XX  
XX Sequence 384 AA;  
SQ  
Query Match 100.0%; Score 2064; DB 22; Length 384;  
Best Local Similarity 100.0%; Pred. No. 2.1e-193;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCPCCRCSGKSNVGTSGDHDSAMKTLRSK 60  
DB 1 mvvevdsmpaassvkkpfglrskmgkwcrcpcrcresgksnvgtsghdhsamktrsk 60  
QY 61 MGKWCRCPCCRCSGKSNVGASGDHDSAMKTLRNKMGKWCCHFCPCCRSGSKSGVAG 120  
DB 61 mgkwcrcpcrcsgksnvgasgdhdsamktrlnkmgkwcchfcpcrcsgsksgvaw 120  
QY 121 GDYDTSAPMEPRYHVRGEDIKLHRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180  
DB 121 gdydsafmepryhvrgeidlkhraawgkvpkdlivmlrtdvnnkdkqkrtalhl 180  
QY 181 SANGNSEVYKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNIPDEYGN 240  
DB 181 sangnsevvkllldrrcqlnvldnkkrtalikavqcqedeccalmlehgtdpniipdeygn 240  
QY 241 TTLHYAIYNEDKLMKALLYGADIESKNKHGLTPLLIGVHEQKQOVVKFLIKKANLNA 300  
DB 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqkqqvkvflikkanlna 300  
QY 301 LDYGRRTALILAVCCGSASIVSLLEONIDVSSQDLSGQTAREYAVSSHVHVICOLLSDY 360  
DB 301 ldrygrtalilavccgsasivslleqnidvssqdisgqtareyavsshhvivicqlsdy 360  
QY 361 KEQMKLIKISSENSNPENVSRTNRK 384  
DB 361 kekqmlkissensnpenvsrtnrk 384  
RESULT 3

AY82017  
ID AAY82017 standard; Protein; 1719 AA.  
XX  
AC AAY82017;  
XX  
DT 13-JUN-2000 (first entry)  
XX  
DE Human immunogenic prostate tumour protein sequence SEQ ID NO:378.  
XX  
XX Human; prostate cancer; diagnosis; tumour; gene therapy; detection;  
KW immunogenic; cytostatic; vaccine.  
XX  
OS Homo sapiens.  
XX  
XX WO200004149-A2.  
PN  
XX  
PD 27-JAN-2000.  
XX  
XX 14-JUL-1999; 99WO-0515838.  
XX  
PR 14-JUL-1998; 98US-0115453.  
XX  
PR 14-JUL-1998; 98US-0116134.  
PR  
PR 23-SEP-1998; 98US-0159812.  
PR  
PR 23-SEP-1998; 98US-0159822.  
PR  
PR 15-JAN-1999; 99US-0232149.  
PR  
PR 15-JAN-1999; 99US-0232880.  
PR  
PR 09-APR-1999; 99US-0288946.  
XX  
XX (CORI-) CORIXA CORP.  
PA  
XX  
XX Dillon DC, Harlocker SL, Yuqiu J, Xu J, Mitcham JL;  
PI  
XX WPI; 2000-171268/15.  
DR  
XX  
XX New polypeptide useful for treating and diagnosing prostate cancer  
PT  
PT Comprises an immunogenic portion of prostate tumor protein -  
XX  
PS Disclosure; Page 225-229; 263pp; English.  
XX  
XX The present invention describes isolated polypeptides, comprising an  
CC immunogenic portion of a prostate tumour protein (PTP). The polypeptides  
CC and polynucleotides encoding them have cytostatic activity and can be  
CC used in vaccines and in gene therapy. The polypeptides and  
CC polynucleotides encoding them, antigen presenting cells which express  
CC the polypeptides, antibodies against the polypeptides and vaccines  
CC comprising them can be used for inhibiting the development of prostate  
CC cancer in a patient. The polypeptides can be used to generate antibodies  
CC or anti-idiotypic antibodies for passive immuno therapy. A portion of  
CC the polynucleotides encoding the polypeptides can be used as a probe or  
CC to modulate the expression of the polypeptides. AA06241 to AA06691 and  
CC AAY82000 to AAY82020 represent sequences used in the exemplification of  
CC the present invention.  
XX  
SQ Sequence 1719 AA;

Query Match  
Best Local Similarity 100.0%; Score 2064; DB 21; Length 1719;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFGLRSMGKWCRCFPCCRESGKSNVGTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdsmpaassvkkpfglrsmgkwccrcfpccresgknsnvtsgdhdssamktrlrsk 60  
QY 61 MGKWCRCFPCCRESGKSNVGTSGDHDSDAMKTLRNMKGWCCHCFPCRCGSKSKVGAW 120  
Db 61 mgkwrchcfpcrcgsksnvgasgdhdssamktrlnmkgkwccchcfpcrcgskskvgaw 120  
QY 121 GDYDSDAPMEPRYHVRCEDLDKLHRAAWGKVPKDLIVMLRDTYNNKKDKQKRTALHLA 180  
Db 121 gdydssdapmepryhvrcehdlklhraawgkvpkrdlivmlrtdvnnkkdkqkrtalhla 180  
QY 181 SANGNSEVVKLLLDRCQLNVLNDNKRRTALIKAVQCQDECALMLLEHGTDPNIPDEYGN 240

Db 181 sangnsevvkllldrrcqlnvldnkkrtallikavqcqdecalmllehgtdpnpideygn 240  
QY 241 TTLHYALYNEDKLMARAKALLYGADIESKNKRGHLPILLGVHEKQOVVFKLKKRANLNA 300  
Db 241 ttlhyalynedkilmakalliygadiesknknkgltplllgyhegkqvkvfllkkkanlna 300  
QY 301 LDRGRTALILAVCCSASIVSLLEQNIIVSSQDLSGTAREYAVSSHVHCQLLSDY 360  
Db 301 ldrgrtallilavccsasivslilleqnidvssqdlsggtareyavsshvhvliclisy 360  
QY 361 KEKOMLKISSENPENSVSTRNK 384  
Db 361 kekqmkkissennpenstvtrnk 384  
RESULT 4  
AAU69777  
ID AAU69777 standard; Protein; 1719 AA.  
XX  
AC AAU69777;  
XX  
DT 30-JAN-2002 (first entry)  
XX  
DE Human prostate cDNA encoded protein #15.  
XX  
KW Human; prostate cancer; cytostatic; immunostimulant; tumour; immunogen.  
XX  
OS Homo sapiens.  
XX  
PN WO200173032-A2.  
XX  
PD 04-OCT-2001.  
XX  
PF 27-MAR-2001; 2001WO-US09919.  
XX  
PR 27-MAR-2000; 2000US-0536857.  
PR 09-MAY-2000; 2000US-0568100.  
PR 12-MAY-2000; 2000US-0570737.  
PR 13-JUN-2000; 2000US-0593793.  
PR 27-JUN-2000; 2000US-0605783.  
PR 27-JUN-2000; 2000US-0605783.  
PR 10-AUG-2000; 2000US-0636215.  
PR 29-AUG-2000; 2000US-0651236.  
PR 06-SEP-2000; 2000US-0657279.  
PR 02-OCT-2000; 2000US-0679426.  
PR 10-OCT-2000; 2000US-0685166.  
XX (CORI-) CORIXA CORP.  
PA  
XX Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Kalos MD;  
PI Fanger GR, Retter MW, Stolk JA, Day CH, Vedwick TS, Carter D;  
PI Li SX, Wang A, Skeiky YAW, Hepler WT, Henderson RA;  
XX  
DR WPI; 2001-639232/73.  
DR N-PSDB; AAS63807.  
XX  
PT New human prostate-specific polypeptides and polynucleotides useful for  
PT the diagnosis and treatment of cancer, especially prostate cancer -  
XX  
PS Claim 2; Page 352-356; 579pp; English.  
XX  
XX The invention relates to isolated prostate-specific  
CC polynucleotides, polypeptides, fusion proteins of the polypeptides,  
CC antibodies raised against the polypeptides (or antigenic epitopes  
CC derived from them) and antigen-presenting cells expressing the  
CC polypeptides. The antibodies are useful for detecting the presence of  
CC cancer, especially prostate cancer. The polypeptides, polynucleotides and  
CC the antigen-presenting cells are useful for stimulating and/or expanding  
CC T cells specific for a tumour protein, and for inhibiting the development  
CC of cancer especially prostate cancer. Compositions comprising the  
CC polynucleotide and/or polypeptide are useful for stimulating an immune  
CC response, and for treating cancer. The oligonucleotide is useful for  
CC detecting cancer. The present sequence is a prostate specific

CC polypeptide of the invention.

XX Sequence 1719 AA;

Query Match 100.0%; Score 2064; DB 22; Length 1719;  
Best Local Similarity 100.0%; Pred. No. 1.8e-192;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVEVDSPAAASVKKPGLRSKMGKWCRCPCRCESGKSNVGTSGDHDSDAMKTLRSK 60  
DB 1 mvevdspaaasvkkpqlrskmgkwcrcfpcrcesgksnvgtsghdhdasamktlrsk 60  
QY 61 MGKWCRCPCRCESGKSNVGTSGDHDSDAMKTLRNKMGKWCCHCPCRCESGSKYGVAG 120  
DB 61 mgkwcrcfpcrcesgksnvgtsghdhdasamktlrnmkgkwcchcpcrcesgsksgyag 120  
QY 121 GDYDDSAFMEPRYHVRGDLKHLRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180  
DB 121 gdyddsaafmepryhvrgehdlkhlraawgkvpkdlivmlrtdtdvnnkdkqkrtalhla 180  
QY 181 SANGSEVVKLLDRRCOLNVLDNKKRTALIKAVOCQEDCALMLEHGTDPNIPDEYGN 240  
DB 181 sangsevvkllldrrcqlnvldnkkrtalikavqcqedcalmllehgtdpnipdeygn 240  
QY 241 TTLHYAIYNEDKIMAKALLYGADIESKNKHGLTPLLGVHEQKQOVVFKLIKKANLNA 300  
DB 241 ttlhyaiynedkimakalllygadiesknkhgltpllgvheqkqvkvfllkkanlna 300  
QY 301 LDYGRPTALILAVCCGSASIVSLLEQNIDVSSQDLSGQTAREYAVSSHVVICQLSDY 360  
DB 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshvhhvicqlsdy 360  
QY 361 KEKOMLKISSENSNPENSVTRNK 384  
DB 361 kekqmlkissensnpensvtrnk 384

#### RESULT 5

AAW01132 ID AAW01132 standard; Protein; 1719 AA.

XX AC AAW01132;

XX DT 04-OCT-2001 (first entry)

XX DE Human prostate-specific sequence B305D amino acid splice variant #13.

XX KW Human; prostate cancer; prostate-specific; diagnosis; vaccine;

XX KW cytosolic; gene therapy; metastasis.

XX OS Homo sapiens.

XX PN WO200151633-A2.

XX PD 19-JUL-2001.

XX PF 16-JAN-2001; 2001WO-US01574.

XX PR 14-JAN-2000; 2000US-0483672.

XX PA (CORI-) CORIXA CORP.

XX PI Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Reed SG;

XX PI Kalos MD, Fanger GR, Day CH, Retter MW, Stolk JA, Skeiky YAW;

XX PI Wang A, Mesagher MJ;

XX PI WPI; 2001-425873/45.

XX PT New polynucleotide encoding a prostate-specific protein, for  
diagnosing, monitoring and treating prostate cancer in a patient and  
for use in vaccines -

XX XX

PS Claim 2; Page 350-354; 543pp; English.

XX CC The present invention describes polynucleotide sequences (I) which encode  
prostate-specific proteins (II). (I) and (II) have cytostatic activity,  
and can be used in vaccine production and gene therapy. (I), (II),  
antibodies to (II), fusion proteins comprising (II), and isolated  
T cells prepared using (I) or (II) are used to treat cancer in a patient.  
CC (I) and the antibodies are also used in the detection of cancer in a  
patient. The cancer that is diagnosed or treated is particularly  
prostate cancer. (I) and (II) can be used in vaccines. The antibodies or  
(I) can be used for monitoring the progression of cancer in a patient.  
CC (I) and (II) can also be used to improve diagnostic and therapeutic  
methods for prostate cancer. They can indicate the level of metastasis  
as well as the prostate volume. AA93357 to AA93944 and AAM01115 to  
CC AAM01318 represent polynucleotide and amino acid sequences used in the  
exemplification of the present invention.

XX SQ Sequence 1719 AA;

Query Match 100.0%; Score 2064; DB 22; Length 1719;  
Best Local Similarity 100.0%; Pred. No. 1.8e-192;  
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVEVDSPAAASVKKPGLRSKMGKWCRCPCRCESGKSNVGTSGDHDSDAMKTLRSK 60  
DB 1 mvevdspaaasvkkpqlrskmgkwcrcfpcrcesgksnvgtsghdhdasamktlrsk 60  
QY 61 MGKWCRCPCRCESGKSNVGTSGDHDSDAMKTLRNKMGKWCCHCPCRCESGSKYGVAG 120  
DB 61 mgkwcrcfpcrcesgksnvgtsghdhdasamktlrnmkgkwcchcpcrcesgsksgyag 120  
QY 121 GDYDDSAFMEPRYHVRGDLKHLRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180  
DB 121 gdyddsaafmepryhvrgehdlkhlraawgkvpkdlivmlrtdtdvnnkdkqkrtalhla 180  
QY 181 SANGSEVVKLLDRRCOLNVLDNKKRTALIKAVOCQEDCALMLEHGTDPNIPDEYGN 240  
DB 181 sangsevvkllldrrcqlnvldnkkrtalikavqcqedcalmllehgtdpnipdeygn 240  
QY 241 TTLHYAIYNEDKIMAKALLYGADIESKNKHGLTPLLGVHEQKQOVVFKLIKKANLNA 300  
DB 241 ttlhyaiynedkimakalllygadiesknkhgltpllgvheqkqvkvfllkkanlna 300  
QY 301 LDYGRPTALILAVCCGSASIVSLLEQNIDVSSQDLSGQTAREYAVSSHVVICQLSDY 360  
DB 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshvhhvicqlsdy 360  
QY 361 KEKOMLKISSENSNPENSVTRNK 384  
DB 361 kekqmlkissensnpensvtrnk 384

#### RESULT 6

AAAG99017 ID AAG99017 standard; Protein; 1719 AA.

XX AC AAG99017;

XX DT 25-SEP-2001 (first entry)

XX DE Human prostate-specific amino acid sequence B305D splice variant #3.

XX KW Human; prostate cancer; therapy; diagnosis; cat eye syndrome;

XX KW chromosome 22q11.2; prostate-specific protein; chromosome 1;

XX KW prostate specific antigen; PSA.

XX OS Homo sapiens.

XX PN WO200134802-A2.

XX PD 17-MAY-2001.

```

PF 09-NOV-2000; 2000WO-US30504.
XX
PR 12-NOV-1999; 99US-0439313.
PR 18-NOV-1999; 99US-0443686.
XX
XX (CORI-) CORIXA CORP.
XX
XX Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Reed SG;
PI Kalos MD, Retter MW, Stolk JA, Day CH, Skeiky YAW, Wang A;
XX
XX WPI; 2001-308785/32.
XX
XX Isolated polypeptide comprising at least an immunogenic portion of a
PT prostate-specific protein, useful in the diagnosis and therapy of a
PT prostate cancer -
XX
XX Disclosure; Page 250-253; 325pp; English.
XX
XX The present invention describes an isolated polypeptide (P1) comprising
XX at least an immunogenic portion of a prostate-specific protein, or its
XX variant. Also described are polynucleotides (N1) encoding (P1). (P1) and
XX (N1) have cytostatic activity and can be used in vaccine production.
XX The polypeptides, nucleic acids and antibodies from the present
XX invention are useful in the diagnosis and therapy of prostate cancer.
XX Prostate specific genes P704P, P712P, P774P, P775P and B305D are located
XX in a genomic region on chromosome 22q11.2 known as the Cat Eye Syndrome
XX region. Prostate specific antigen (PSA) P501S was located on
XX chromosome 1. AAB84671 to AAB85143 and AAG99000 to AAG99077 represent
XX polynucleotide and polypeptide sequences used in the exemplification
XX of the present invention.
XX
XX Sequence 1719 AA;

Query Match 100.0%; Score 2064; DB 22; Length 1719;
Best Local Similarity 100.0%; Pred. No. 1.8e-192;
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCFPCCRESGSKSNVGTSGDHDSDSAMKTLRSK 60
Db 1 mvvevdsmpaassvkkpfglrskmgkwcrcfpcrcresgsksnvgtsgdhdhsamktlrsk 60
QY 61 MGKWCRCFPCRCRGSGSKSNVGSAGSDHDDSAMKTLRNKMGKWCRCFPCRCRGSGSKSNVGSAG 120
Db 61 mgkwcrcfpcrcrgsgsksnvgasgdhdhsamktlrnkmgkwcrcfpcrcrgsgsksnvgaw 120
QY 121 GDYDSDAFMEPRYHYVRGEDIKHLRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180
Db 121 gdydsafmepryhyvrgeidkhlraawgkvpkdlivmlrtdvnnkdkqkrtalhla 180
QY 181 SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNPDEYGN 240
Db 181 sangnsevvkllldrrcqnlvldnkkrtalikavqcqgedecalmlehgtdpnpideygn 240
QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHGLTPLLGVHEQKQOVVFKLKKKANLNA 300
Db 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqkqvkvfllkkanlna 300
QY 301 LDYRGRTALILAVCCGSASIVSLLEQNIDVSSODLSGOTAREYAVSSHHHVICQLLSDY 360
Db 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshhhviciqllsdy 360
QY 361 KEKQMLKTSSENSPNVSTRNK 384
Db 361 kekqmlktsenspnvstrnk 384

RESULT 7
AAB74815
ID AAB74815 standard; Protein; 1719 AA.
XX
XX AAB74815;
XX

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```

DT 14-JUN-2001 (first entry)
XX
DE Prostate tumour antigen splice variant of B305D amino acid sequence #3.
XX
KW Human; prostate tumour antigen; prostate tumour; therapy; diagnosis;
KW prostate cancer; immunogenic; cytostatic; vaccine.
XX
OS Homo sapiens.
XX
PN WO200125272-A2.
XX
PD 12-APR-2001.
XX
PF 04-OCT-2000; 2000WO-US27464.
XX
PR 04-OCT-1999; 99US-0157455.
XX
XX (CORI-) CORIXA CORP.
XX
XX Xu J, Skeiky YAW, Reed SG, Cheever MA;
XX WPI; 2001-245062/25.
XX N-PSDB; AAB02779.
XX
XX Prostate specific protein and its encoding polynucleotide, useful for
XX the treatment and diagnosis of prostate cancer -
XX
XX Disclosure; Page 235-238; 276pp; English.
XX
XX The present invention describes an isolated polypeptide (I) comprising
XX at least an immunogenic portion of a prostate tumour antigen protein or
XX its variant. (I) have cytostatic activity and can be used in vaccine
XX production. (I), prostate tumour antigen polynucleotides, an antigen
XX pharmaceutical cell (APC e.g. a dendritic cell) that expresses (I), and a
XX development of cancer in a patient. Antibodies specific for prostate
XX specific proteins and oligonucleotides that hybridise to a
XX polynucleotide that encodes a prostate specific protein are useful
XX for detecting the presence or absence of a cancer or monitoring the
XX progression the progression of a cancer, especially prostate cancer.
XX AAB02422 to AAB2872, AAB74798 to AAB74821 and AAB74830 are sequences
XX used in the exemplification of the present invention.
XX
XX Sequence 1719 AA;

Query Match 100.0%; Score 2064; DB 22; Length 1719;
Best Local Similarity 100.0%; Pred. No. 1.8e-192;
Matches 384; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCFPCCRESGSKSNVGTSGDHDSDSAMKTLRSK 60
Db 1 mvvevdsmpaassvkkpfglrskmgkwcrcfpcrcresgsksnvgtsgdhdhsamktlrsk 60
QY 61 MGKWCRCFPCRCRGSGSKSNVGSAGSDHDDSAMKTLRNKMGKWCRCFPCRCRGSGSKSNVGSAG 120
Db 61 mgkwcrcfpcrcrgsgsksnvgasgdhdhsamktlrnkmgkwcrcfpcrcrgsgsksnvgaw 120
QY 121 GDYDSDAFMEPRYHYVRGEDIKHLRAAWGKVPKDLIVMLRDTDVNKKDKQKRTALHLA 180
Db 121 gdydsafmepryhyvrgeidkhlraawgkvpkdlivmlrtdvnnkdkqkrtalhla 180
QY 181 SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNPDEYGN 240
Db 181 sangnsevvkllldrrcqnlvldnkkrtalikavqcqgedecalmlehgtdpnpideygn 240
QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHGLTPLLGVHEQKQOVVFKLKKKANLNA 300
Db 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqkqvkvfllkkanlna 300
QY 301 LDYRGRTALILAVCCGSASIVSLLEQNIDVSSODLSGOTAREYAVSSHHHVICQLLSDY 360
Db 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshhhviciqllsdy 360

```

QY 361 KEKOMLKISSNSNPENSVTRNK 384  
Db 361 kekqmlkissnsnpensvtrnk 384

RESULT 8  
AAB28629  
ID AAB28629 standard; Protein; 656 AA.  
XX AAB28629;  
XX  
DT 13-FEB-2001 (first entry)  
XX Human B1lAg1 antigen splice isoform B1lC-8.  
XX  
XX Human: breast tumour-specific antigen; cytostatic; vaccine;  
XX breast cancer; B18Ag1; B15Ag1.  
XX  
XX Homo sapiens.  
XX  
XX WO200061753-A2.  
XX  
XX 19-OCT-2000.  
XX  
XX 07-APR-2000; 200WO-US09312.  
XX  
XX 09-APR-1999; 99US-0289198.  
XX 28-OCT-1999; 99US-0429755.  
XX 23-MAR-2000; 2000US-0534825.  
XX  
XX (CORI-) CORIXA CORP.  
XX  
XX Frudakis TN, Smith JM, Reed SG, Misher LE, Retter MW, Dillon DC;  
XX  
XX WPI: 2000-628403/60.  
XX N-PSDB; AAC81012.  
XX  
XX An isolated polypeptide comprising an immunogenic portion of a breast  
XX tumor protein used for inhibiting the development of cancer, especially  
XX breast cancer, and monitoring cancer progression in a patient -  
XX  
XX Claim 3; Page 180-181; 187pp; English.

XX The present sequence is given in a specification relating to compositions  
XX and methods for the treatment and diagnosis of breast cancer. Nucleotide  
XX sequences that are preferentially expressed in breast tumour tissue, and  
XX the polypeptides encoded by such nucleotide sequences, are used in  
XX compositions and vaccines to inhibit the development of cancer,  
XX especially breast cancer. The progression of a cancer may be monitored by  
XX carrying out detection of tumour-specific antigens at subsequent time  
XX points and comparing the results from the different time points.  
XX CD4+ and/or CD8+ T-Cells isolated from the cancer patient may be treated  
XX with tumour-specific polypeptides, polynucleotides encoding the  
XX polypeptides or antigen presenting cells expressing the polypeptides. The  
XX cells are then administered to the patient to inhibit development of  
XX cancer.  
XX  
XX Sequence 656 AA;

Query Match 98.1%; Score 2024; DB 21; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVEVDSPAASSVKPFGLRSMGWKCRCPCCRSGKSNVGTSGDHDSDAMKTLRSK 60  
Db 1 mvevdspaaassvkkpfglrsmgkwccrcpcrcsgksnvgtsgdhdhsamtklrsk 60  
QY 61 MGKWCRCPCCRSGKSNVGSAGDHDSDAMKTLRNKGWKCRCPCCRSGSKSVGVAG 120  
Db 61 mgkwcrcpcrcsgksnvgsagdhdsamtklrlnmgkwccrcpcrcsgsksvgvag 120

QY 121 GDYDSSAFMEPRYHVRGDELDLKHRAAWGKVPKDLIVMLRDTDVNKKQKRTALHLA 180  
Db 121 gdyddsafmepryhvrgeklkhraawgkvpkdlivmlrtdvnnkkdkqkrtalhla 180  
QY 181 SANGNSEVVKLLDRRCOLNVLDNKRKTALIKAVQCEDECALMLEHGTOPNIPDEYN 240  
Db 181 sangnsevvkllldrrcqlnvldnkrktalikavqcqededcalmlehgtdpnipdeyn 240  
QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHGLTPLLGVHEQKQOVVFKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqkqvkvfllkkanlna 300  
QY 301 LDYGRGTALILAVCCGSASIVSLLEQNIIDVSSQDLSGQTAREYAVSSHHRVICQLLSY 360  
Db 301 ldrygrtalilavccgsasivslilleqnidvssqdlsgqtareyavsshhrvicqlilsy 360  
QY 361 KEKOMLKISSNSNPE 376  
Db 361 kekqmlkissnsnpe 376

RESULT 9  
AAY82018  
ID AAY82018 standard; Protein; 656 AA.  
XX AAY82018;  
XX  
DT 13-JUN-2000 (first entry)  
XX Human immunogenic prostate tumour protein sequence SEQ ID NO:379.  
XX  
XX Human; prostate cancer; diagnosis; tumour; gene therapy; detection;  
XX immunogenic; cytostatic; vaccine.  
XX  
XX Homo sapiens.  
XX WO200004149-A2.  
XX  
XX 27-JAN-2000.  
XX  
XX 14-JUL-1999; 99WO-US15838.  
XX  
XX 14-JUL-1998; 98US-0115453.  
XX 14-JUL-1998; 98US-0116134.  
XX 23-SEP-1998; 98US-0159812.  
XX 23-SEP-1998; 98US-0159822.  
XX 15-JAN-1999; 99US-0232149.  
XX 15-JAN-1999; 99US-0232880.  
XX 09-APR-1999; 99US-0288946.  
XX (CORI-) CORIXA CORP.  
XX  
XX Dillon DC, Harlocker SL, Yuqiu J, Xu J, Mitcham JL;  
XX  
XX WPI: 2000-171268/15.  
XX  
XX New polypeptide useful for treating and diagnosing prostate cancer  
XX comprises an immunogenic portion of prostate tumor protein -  
XX  
XX Disclosure; Page 229-231; 263pp; English.

XX The present invention describes isolated polypeptides, comprising an  
XX immunogenic portion of a prostate tumour protein (ptp). The polypeptides  
XX and polynucleotides encoding them have cytostatic activity and can be  
XX used in vaccines and in gene therapy. The polypeptides and  
XX polynucleotides encoding them, antigen presenting cells which express  
XX the polypeptides, antibodies against the polypeptides and vaccines  
XX comprising them can be used for inhibiting the development of prostate  
XX cancer in a patient. The polypeptides can be used to generate antibodies  
XX or anti-idiotypic antibodies for passive immuno therapy. A portion of  
XX the polynucleotides encoding the polypeptides can be used as a probe or  
XX to modulate the expression of the polypeptides. AAO6241 to AAA0691 and  
XX AAY82000 to AAY82020 represent sequences used in the exemplification of

CC the present invention.  
XX  
SQ Sequence 656 AA;

Query Match 98.1%; Score 2024; DB 21; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCPCPCRESGKSNVCTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdsmptaassvkkpfglrskmgkwcrcpcpcresgksnvctsgdhdssamktlrsk 60

QY 61 MGKWCRCPCPCRCGSGKSNVGASGDHDDSAMKTLRNKMGKWCCHPCPCRCGSGKSKVGAW 120  
Db 61 mgkwcrcpcpcrcgsgksnvgasgdhdssamktlrnmgkwcchpcpcrcgsgkskvga 120

QY 121 GDYDSSAFMEPRYHVREGEDLKHRAAWMGKVPKRDILVLRDVTDNKKDKQKRTALHLA 180  
Db 121 gdydssafmepryhvrgeedlkhraawmgkvpkrdliivlrldvtnkkdkqkrtalhl 180

QY 181 SANGNSEVVKLLDRLRCQLNVLDNKKRTALIKAVQCQDECALMLLEHGTDPNIPDEYN 240  
Db 181 sangnsevvkllldrrcqlnvldnkkrtalrikavqcqdecalmllehgtdpnpideyn 240

QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHLTPLLLGVEHQKQVVKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmakallygadiesknkhltplllgvheqkqvkvkflikkannlna 300

QY 301 LDYRGTALILAVCCGSASIVSLLLPONTDVSQDLSSQDTAREYAVSSHVHVICOLLSDY 360  
Db 301 ldrygrtalilavccgsasivslilleqnlidvssqdlsgqtareyavsshvhvicollsd 360

QY 361 KEKQMLKISSSENSNPE 376  
Db 361 kekqmlkissensnpe 376

RESULT 10  
AA065977  
ID AAG65977 standard; Protein: 656 AA.  
XX  
AC AAG65977;  
DT 11-FEB-2002 (first entry)  
XX  
DE B305D isoform C splice variant 2.  
XX  
XX Genetic subtraction; DNA microarray analysis; polymerase chain reaction;  
KW cancer; B305D.  
XX  
OS Homo sapiens.  
XX  
PN WO200175171-A2.  
XX  
PD 11-OCT-2001.  
XX  
PF 02-APR-2001; 2001WO-US10631.  
XX  
PR 03-APR-2000; 2000US-194241P.  
PR 20-JUL-2000; 2000US-219862P.  
PR 27-JUL-2000; 2000US-221300P.  
PR 18-DEC-2000; 2000US-256592P.  
XX  
XX (CORI-) CORIXA CORP.  
XX  
PI Houghton RL, Dillon DC, Molesh DA, Xu J, Zehentner B, Persing DH;  
XX  
XX WPI; 2001-626449/72.  
DR N-PSDB; AA167212.  
XX  
XX Identifying tissue (tumour)-specific polynucleotides overexpressed in  
PI tissue of interest as compared to control tissue, for detecting cancer

PT cells in patient, comprises DNA microarray analysis or quantitative  
PT polymerase chain reaction -  
XX  
XX Examples; Page 95-96; 127pp; English.  
XX  
XX The invention relates to identifying tissue-specific polynucleotides (P)  
CC that involves performing a genetic subtraction to identify pool of (P)  
CC from tissue of interest (TI), performing DNA microarray analysis to  
CC identify first subset of polynucleotides (SPl) at least 2-fold over  
CC expressed in TI, and performing quantitative polymerase chain reaction  
CC (PCR) analysis on SPl to identify second subset of (P). The method is  
CC useful for determining the presence or absence of a cancer cell in a  
CC patient, monitoring the progression of cancer in a patient using a  
CC biological sample such as blood, serum, lymph nodes, bone marrow, sputum,  
CC urine or a tumour biopsy sample. The methods are useful for determining  
CC the presence or absence of or monitoring progression of prostate, breast,  
CC colon, ovarian, lung, head and neck, lymphoma, leukemia, melanoma, liver,  
CC gastric, kidney, bladder, pancreatic or endometrial cancer. The present  
CC sequence represents a B305D isoform C splice variant.  
XX  
SQ Sequence 656 AA;

Query Match 98.1%; Score 2024; DB 22; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCPCPCRESGKSNVCTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdsmptaassvkkpfglrskmgkwcrcpcpcresgksnvctsgdhdssamktlrsk 60

QY 61 MGKWCRCPCPCRCGSGKSNVGASGDHDDSAMKTLRNKMGKWCCHPCPCRCGSGKSKVGAW 120  
Db 61 mgkwcrcpcpcrcgsgksnvgasgdhdssamktlrnmgkwcchpcpcrcgsgkskvga 120

QY 121 GDYDSSAFMEPRYHVREGEDLKHRAAWMGKVPKRDILVLRDVTDNKKDKQKRTALHLA 180  
Db 121 gdydssafmepryhvrgeedlkhraawmgkvpkrdliivlrldvtnkkdkqkrtalhl 180

QY 181 SANGNSEVVKLLDRLRCQLNVLDNKKRTALIKAVQCQDECALMLLEHGTDPNIPDEYN 240  
Db 181 sangnsevvkllldrrcqlnvldnkkrtalrikavqcqdecalmllehgtdpnpideyn 240

QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHLTPLLLGVEHQKQVVKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmakallygadiesknkhltplllgvheqkqvkvkflikkannlna 300

QY 301 LDYRGTALILAVCCGSASIVSLLLPONTDVSQDLSSQDTAREYAVSSHVHVICOLLSDY 360  
Db 301 ldrygrtalilavccgsasivslilleqnlidvssqdlsgqtareyavsshvhvicollsd 360

QY 361 KEKQMLKISSSENSNPE 376  
Db 361 kekqmlkissensnpe 376

RESULT 11  
AA069778  
ID AA069778 standard; Protein: 656 AA.  
XX  
AC AA069778;  
XX  
DT 30-JAN-2002 (first entry)  
XX  
XX Human prostate cDNA encoded protein #16.  
XX  
XX Human; prostate cancer; cytostatic; immunostimulant; tumour; immunogen.  
XX  
XX Homo sapiens.  
OS  
PN WO200173032-A2.  
XX  
PD 04-OCT-2001.

XX 27-MAR-2001; 2001WO-US09919.  
PF  
XX 27-MAR-2000; 2000US-0536857.  
XX 09-MAY-2000; 2000US-0568100.  
PR 12-MAY-2000; 2000US-0570737.  
PR 13-JUN-2000; 2000US-0593793.  
PR 27-JUN-2000; 2000US-0605783.  
PR 10-AUG-2000; 2000US-0636215.  
PR 29-AUG-2000; 2000US-0651236.  
PR 06-SEP-2000; 2000US-0657279.  
PR 02-OCT-2000; 2000US-0679426.  
PR 10-OCT-2000; 2000US-0685166.  
XX  
FA (CORI-) CORIXA CORP.  
XX  
XX Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Kalos MD;  
PI Fanger GR, Retter MW, Stolk JA, Day CH, Vedrick TS, Carter D;  
PI Li SX, Wang A, Skeiky YAW, Hepler WT, Henderson RA;  
XX  
XX WPI: 2001-639232/73.  
DR N-PSDB; AAS63808.  
XX  
XX New human prostate-specific polypeptides and polynucleotides useful for  
PT the diagnosis and treatment of cancer, especially prostate cancer -  
XX  
XX Claim 2: Page 356-357; 579pp; English.  
XX  
XX The invention relates to isolated prostate-specific  
CC polynucleotides, polypeptides, fusion proteins of the polypeptides,  
CC antibodies raised against the polypeptides (or antigenic epitopes  
CC derived from them) and antigen-presenting cells expressing the  
CC polypeptides. The antibodies are useful for detecting the presence of  
CC cancer, especially prostate cancer. The polypeptides, polynucleotides and  
CC the antigen-presenting cells are useful for stimulating and/or expanding  
CC T cells specific for a tumour protein, and for inhibiting the development  
CC of cancer especially prostate cancer. Compositions comprising the  
CC polynucleotide and/or polypeptide are useful for stimulating an immune  
CC response, and for treating cancer. The oligonucleotide is useful for  
CC detecting cancer. The present sequence is a prostate specific  
CC polypeptide of the invention.  
XX  
SQ Sequence 656 AA;  
  
Query Match 98.1%; Score 2024; DB 22; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCFPCCRSGSKSNVGTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdsmpaassvkkpfglrskmgkwccrcfpccresgsksnvgtsgdhdssamktlrsk 60  
  
QY 61 MGKWCRCFPCCRSGSKSNVGASGDHDSDAMKTLRNKMGKWCCHCFPCCRSGSKSKVGAW 120  
Db 61 mgkwcrchfpcprsgsksnvgasgdhdssamktlrnkmgkwccchcfpcprsgskskvgaw 120  
  
QY 121 GDYDDSAFMEPRYHVRGSDLDKLRRAAWGKVPKRDLIIVMLRDTDVNKKDKOKRTALHLA 180  
Db 121 gdyddsafmepryhvrgehdlkhrAAWgkvpkrDliivmlrDtdvNkKdkokrtAlhLA 180  
  
QY 181 SANGSEVVKLLIDRRCOLNVDNKKRTALIKAVQCQDECALMLEHGTDPNTPDEYGN 240  
Db 181 sangsevvkllldrrcolnvdnkkrtalIkaVqcqdecalmlehgtdpnpdeygn 240  
  
QY 241 TTLHYAIYNEDKLMKAKALLYGADIESKNKHGLTPLLGVHEQKQVQVYKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmkakallYGadiesknkhgltPlLlGVheqkqvvykflIkkAnlNA 300  
  
QY 301 LDYRGRTALILAVCCGSASIVSLLEQNIIDVSSODLSGGTAREYAVSSHVHVICOLLSDY 360  
Db 301 ldyrgrtalilavccgsasivslleqniidvssodlsGGtareYavsshvHvicollsdY 360

QY 361 KEQOMLKISSNSNPE 376  
Db 361 kekqmlkissnsnpe 376  
  
RESULT 12  
AAM01133  
ID AAM01133 standard; Protein; 656 AA.  
XX  
AC AAM01133;  
XX  
DT 04-OCT-2001 (first entry)  
XX  
DE Human prostate-specific sequence B305D amino acid splice variant #14.  
XX  
KW Human prostate cancer; prostate-specific; diagnosis; vaccine;  
KW cytostatic; gene therapy; metastasis.  
XX  
OS Homo sapiens.  
XX  
PN WO200151633-A2.  
XX  
PD 19-JUL-2001.  
XX  
PE 16-JAN-2001; 2001WO-US01574.  
XX  
PR 14-JAN-2000; 2000US-0483672.  
XX  
PA (CORI-) CORIXA CORP.  
XX  
PI Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Reed SG;  
PI Kalos MD, Fanger GR, Day CH, Retter MW, Stolk JA, Skeiky YAW;  
PI Wang A, Meagher MJ;  
XX  
XX WPI: 2001-425873/45.  
XX  
XX New polynucleotide encoding a prostate-specific protein, for  
PT diagnosing, monitoring and treating prostate cancer in a patient and  
PT for use in vaccines -  
XX  
PS Claim 2: Page 354-355; 543pp; English.  
XX  
XX The present invention describes polynucleotide sequences (I) which encode  
CC prostate-specific proteins (II). (I) and (II) have cytostatic activity,  
CC and can be used in vaccine production and gene therapy. (I), (II),  
CC antibodies to (II), fusion proteins comprising (II), and isolated  
CC T cells prepared using (I) or (II) are used treat cancer in a patient.  
CC (I) and the antibodies are also used in the detection of cancer in a  
CC patient. The cancer that is diagnosed or treated is particularly  
CC prostate cancer (I) and (II) can be used in vaccines. The antibodies or  
CC (I) can be used for monitoring the progression of cancer in a patient.  
CC (I) and (II) can also be used to improve diagnostic and therapeutic  
CC methods for prostate cancer. They can indicate the level of metastasis  
CC as well as the prostate volume. AAR93357 to AAR93944 and AAM01115 to  
CC AAM01318 represent polynucleotide and amino acid sequences used in the  
CC exemplification of the present invention.  
XX  
SQ Sequence 656 AA;  
  
Query Match 98.1%; Score 2024; DB 22; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
  
QY 1 MVVEVDSMPAASSVKKPFGLRSKMGKWCRCFPCCRSGSKSNVGTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdsmpaassvkkpfglrskmgkwccrcfpccresgsksnvgtsgdhdssamktlrsk 60  
  
QY 61 MGKWCRCFPCCRSGSKSNVGASGDHDSDAMKTLRNKMGKWCCHCFPCCRSGSKSKVGAW 120  
Db 61 mgkwcrchfpcprsgsksnvgasgdhdssamktlrnkmgkwccchcfpcprsgskskvgaw 120  
  
QY 121 GDYDDSAFMEPRYHVRGSDLDKLRRAAWGKVPKRDLIIVMLRDTDVNKKDKOKRTALHLA 180



Db 121 gyydssafmepryhvrgeidklhraawgkvrkdliwmlrtdvnnkdkqkrtalhla 180  
QY 181 SANGSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDEECALMLLEHGTDPNPDEYGN 240  
Db 181 sangsevvkllldrrcqlnvldnkkrtalikaavqcqedeccalmlehgtdpnpdeygn 240  
QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHGUTPLLLGVHQBKQOVVKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqgqvkvflikkkanlna 300  
QY 301 LDYGRRTALILAVCCGSASIVSLLLEONIDVSSODLSGQTAREYAVSSHHRVICQLLSDY 360  
Db 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshhrvicqllsdy 360  
QY 361 KEKQMLKISSNSNPE 376  
Db 361 kekqmlkissensnpe 376  
RESULT 13  
AAG99018  
ID AAG99018 standard; Protein; 656 AA.  
XX AC AAG99018;  
XX DT 25-SEP-2001 (first entry)  
XX DE Human prostate-specific amino acid sequence B305D splice variant #4.  
XX KW Human; prostate cancer; therapy; diagnosis; cat eye syndrome;  
KW chromosome 22q11.2; prostate-specific protein; chromosome 1;  
KW prostate specific antigen; PSA.  
XX OS Homo sapiens.  
XX PN WO200134802-A2.  
XX PD 17-MAY-2001.  
XX PF 09-NOV-2000; 2000WO-US30904.  
XX PR 12-NOV-1999; 99US-0439313.  
XX PR 18-NOV-1999; 99US-0443686.  
XX PA (CORI-) CORIXA CORP.  
XX PI Xu J, Dillon DC, Mitcham JL, Harlocker SL, Jiang Y, Reed SG;  
PI Kalos MD, Retter MW, Stolk JA, Day CH, Skeiky YAW, Wang A;  
XX WPI; 2001-308785/32.  
XX Isolated polypeptide comprising at least an immunogenic portion of a  
PT prostate-specific protein, useful in the diagnosis and therapy of  
PT prostate cancer -  
XX Disclosure; Page 254-255; 325pp; English.  
XX CC The present invention describes an isolated polypeptide (P1) comprising  
CC at least an immunogenic portion of a prostate-specific protein, or its  
CC variant. Also described are polynucleotides (N1) encoding (P1), (P1) and  
CC (N1) have cytostatic activity and can be used in vaccine production.  
CC The polypeptides, nucleic acids and antibodies from the present  
CC invention are useful in the diagnosis and therapy of prostate cancer.  
CC Prostate specific genes P704P, P712P, P774P, P775P and B305D are located  
CC in a genomic region on chromosome 22q11.2 known as the Cat Eye syndrome  
CC region. Prostate specific antigen (PSA) P501S was located on  
CC chromosome 1. AAH84671 to AAH85143 and AAG99000 to AAG99077 represent  
CC of the present invention.  
XX Sequence 656 AA;

Query Match 98.1%; Score 2024; DB 22; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVVEVDSMPAASSVKPFGLRSKMGKWCRCPCPCRESGKSNVGTSGDHDSDAMKTLRSK 60  
Db 1 mvvevdmpaassvkkpfglrskmgkwccrcfpcrcresgksnvgtsgdhdssamktlrsk 60  
QY 61 MGKWCRCFCPCRCGSGKSNVGASGDHDDSAMKTLRNKMGKWCCHCFCPCRCGSGKSKVGAW 120  
Db 61 mgkwcrchcfcpcrcgsgksnvgasgdhdssamktlrnmgkwccchcfcpcrcgsgkskvaw 120  
QY 121 GYDDSAFMEPRYHVRGEDLDKLHRAAWGKVRKDLIVMLRDTDVNNKKQKRTALHLA 180  
Db 121 gyddsaafmepryhvrgeidklhraawgkvrkdliwmlrtdvnnkdkqkrtalhla 180  
QY 181 SANGSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDEECALMLLEHGTDPNPDEYGN 240  
Db 181 sangsevvkllldrrcqlnvldnkkrtalikaavqcqedeccalmlehgtdpnpdeygn 240  
QY 241 TTLHYAIYNEDKLMAKALLYGADIESKNKHGUTPLLLGVHQBKQOVVKFLIKKANLNA 300  
Db 241 ttlhyaiynedklmakalllygadiesknkhgltplllgvheqgqvkvflikkkanlna 300  
QY 301 LDYGRRTALILAVCCGSASIVSLLLEONIDVSSODLSGQTAREYAVSSHHRVICQLLSDY 360  
Db 301 ldrygrtalilavccgsasivslleqnidvssqdlsgqtareyavsshhrvicqllsdy 360  
QY 361 KEKQMLKISSNSNPE 376  
Db 361 kekqmlkissensnpe 376  
RESULT 14  
AAB74816  
ID AAB74816 standard; Protein; 656 AA.  
XX AC AAB74816;  
XX DT 14-JUN-2001 (first entry)  
XX DE Prostate tumour antigen splice variant of B305D amino acid sequence #4.  
XX KW Human; prostate tumour antigen; prostate tumour; therapy; diagnosis;  
KW prostate cancer; immunogenic; cytostatic; vaccine.  
XX OS Homo sapiens.  
XX PN WO200125272-A2.  
XX PD 12-APR-2001.  
XX PF 04-OCT-2000; 2000WO-US27464.  
XX PR 04-OCT-1999; 99US-0157455.  
XX PA (CORI-) CORIXA CORP.  
XX PI Xu J, Skeiky YAW, Reed SG, Cheever MA;  
XX WPI; 2001-245062/25.  
XX N-PSDB; AAH02780.  
XX Prostate specific protein and its encoding polynucleotide, useful for  
PT the treatment and diagnosis of prostate cancer -  
XX Disclosure; Page 238-239; 276pp; English.  
XX CC The present invention describes an isolated polypeptide (I) comprising  
CC at least an immunogenic portion of a prostate tumour antigen protein or  
CC its variant. (I) have cytostatic activity and can be used in vaccine  
CC production. (I), prostate tumour antigen polynucleotides, an antigen

CC presenting cell (APC e.g. a dendritic cell) that expresses (I), and a  
CC pharmaceutical composition containing (I) are useful for inhibiting the  
CC development of cancer in a patient. Antibodies specific for prostate  
CC specific proteins and oligonucleotides that hybridize to a  
CC polynucleotide that encodes a prostate specific protein are useful  
CC for detecting the presence or absence of a cancer or monitoring the  
CC progression the progression of a cancer, especially prostate cancer.  
CC AA02422 to AA02872, AAB74798 to AAB74821 and AAB74830 are sequences  
CC used in the exemplification of the present invention.  
XX  
XX  
SQ Sequence 656 AA;

Query Match 98.1%; Score 2024; DB 22; Length 656;  
Best Local Similarity 100.0%; Pred. No. 3.7e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVEVDSPAAASVKKPFGLRSKMGKWCRCPCPCRESGKSNVGTSGDHDSDAMKTLRSK 60  
DB 1 mvvevdmpaassvkkpfglrskmgkwcrcfpcrcresgksnvgtsgdhdssamktlrsk 60  
QY 61 MGKWCRCPCPCRESGKSNVGTSGDHDSDAMKTLRNKMGKWCRCPCPCRESGSKSVGAW 120  
DB 61 mgkwcrcfpcrcresgksnvgtsgdhdssamktlrnmgkwcrcfpcrcresgkskvaw 120  
QY 121 GDYDSSAFMEPRYHVRGEDIKLRHAAWGWKVPKRDILVLMLEDTVNNKDKQKRTALHLA 180  
DB 121 gdydssafmepryhvrgeidklhraawgwkvprkdilvmlldtdvnnkdkqkrtalhla 180  
QY 181 SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNIPDEYGN 240  
DB 181 sangnsevvkllldrrcqnlvldnkkrtalikavqcqdecalmllehgtdpnipdeygn 240  
QY 241 TTLHYAIYNEDKLMKALLYGADIESKNKHGTLPLLLGVHEQKQVVKFLIKKANLNA 300  
DB 241 ttlyhaiynedklmakallygadiesknkhgtlplllgvheqkgqvkvflikkkanlna 300  
QY 301 LDYGRGTALILAVCCGSASIVSLLEQNTIDVSSQDLSGQTAREYAVSSHVHVICQLLSY 360  
DB 301 ldrygrtalilavccgsasivslleqndvssqdlsgqtareyavsshvhvicqllsdy 360  
QY 361 KEKOMLKISSENSNPE 376  
DB 361 kekqmlkissensnpe 376

RESULT 15  
AAB28630  
ID AAB28630 standard; Protein; 671 AA.  
XX  
AC AAB28630;  
XX  
DT 13-FEB-2001 (first entry)  
XX  
DE Human B1Agl antigen splice isoform B11C-9-16.  
XX  
KW Human; breast tumour-specific antigen; cytostatic; vaccine;  
KW breast cancer; B18Agl; B1Agl; B15Agl.  
XX  
OS Homo sapiens.  
XX  
PN WO2000061753-A2.  
XX  
PD 19-OCT-2000.  
XX  
PF 07-APR-2000; 2000WO-US09312.  
XX  
PR 09-APR-1999; 99US-0289198.  
PR 28-OCT-1999; 99US-0429755.  
PR 23-MAR-2000; 2000US-0534825.  
XX  
PA (CORI-) CORIXA CORP.  
XX

PI Frudakis TN, Smith JM, Reed SG, Misher LE, Retter MW, Dillon DC;  
XX WPI; 2000-628403/60.  
DR N-PSDB; AAC81013.  
XX  
PT An isolated polypeptide comprising an immunogenic portion of a breast  
PT tumor protein used for inhibiting the development of cancer, especially  
PT breast cancer, and monitoring cancer progression in a patient -  
XX  
XX Claim 3; Page 181-183; 187pp; English.  
XX  
CC The present sequence is given in a specification relating to compositions  
CC and methods for the treatment and diagnosis of breast cancer. Nucleotide  
CC sequences that are preferentially expressed in breast tumour tissue, and  
CC the polypeptides encoded by such nucleotide sequences, are used in  
CC especially breast cancer. The progression of a cancer may be monitored by  
CC carrying out detection of tumour-specific antigens at subsequent time  
CC points and comparing the results from the different time points. The  
CC CD4+ and/or CD8+ T-cells isolated from the cancer patient may be treated  
CC with tumour-specific polypeptides, polynucleotides encoding the  
CC polypeptides or antigen presenting cells expressing the polypeptides. The  
CC cells are then administered to the patient to inhibit development of  
CC cancer.  
XX  
SQ Sequence 671 AA;

Query Match 98.1%; Score 2024; DB 21; Length 671;  
Best Local Similarity 100.0%; Pred. No. 3.9e-189;  
Matches 376; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
QY 1 MVEVDSPAAASVKKPFGLRSKMGKWCRCPCPCRESGKSNVGTSGDHDSDAMKTLRSK 60  
DB 1 mvvevdmpaassvkkpfglrskmgkwcrcfpcrcresgksnvgtsgdhdssamktlrsk 60  
QY 61 MGKWCRCPCPCRESGKSNVGTSGDHDSDAMKTLRNKMGKWCRCPCPCRESGSKSVGAW 120  
DB 61 mgkwcrcfpcrcresgksnvgtsgdhdssamktlrnmgkwcrcfpcrcresgkskvaw 120  
QY 121 GDYDSSAFMEPRYHVRGEDIKLRHAAWGWKVPKRDILVLMLEDTVNNKDKQKRTALHLA 180  
DB 121 gdydssafmepryhvrgeidklhraawgwkvprkdilvmlldtdvnnkdkqkrtalhla 180  
QY 181 SANGNSEVVKLLDRRCQLNVLDNKKRTALIKAVQCQDECALMLEHGTDPNIPDEYGN 240  
DB 181 sangnsevvkllldrrcqnlvldnkkrtalikavqcqdecalmllehgtdpnipdeygn 240  
QY 241 TTLHYAIYNEDKLMKALLYGADIESKNKHGTLPLLLGVHEQKQVVKFLIKKANLNA 300  
DB 241 ttlyhaiynedklmakallygadiesknkhgtlplllgvheqkgqvkvflikkkanlna 300  
QY 301 LDYGRGTALILAVCCGSASIVSLLEQNTIDVSSQDLSGQTAREYAVSSHVHVICQLLSY 360  
DB 301 ldrygrtalilavccgsasivslleqndvssqdlsgqtareyavsshvhvicqllsdy 360  
QY 361 KEKOMLKISSENSNPE 376  
DB 361 kekqmlkissensnpe 376

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